165. *Xylophaga dorsalis*, Turton.

Wood dredged at Trondhjem which had been bored by this species.

[To be continued.]

EXPLANATION OF PLATE XVI.

Fig. 1. *Ukko Turtoni*, var. *brevis*, Norman, nat. size.
Fig. 2. *Ukko Turtoni*, var. *tumida*, Norman, nat. size; the lip much broken below.
Fig. 3. *Ukko schantaricus*, Middendorff, nat. size; specimen from the North Pacific.
Fig. 4. *Sipho gracilis*, var. *glaber*, Verkruzen, dwarf form, nat. size.
Fig. 4 *a*. Apical whorls of the last, to show the rudely coiled nucleus.
Fig. 5. *Sipho propinquus*, Alder, var. from the Kattegat, nat. size, to show its close approximation in form to fig. 4.
Fig. 5 *a*. Apical whorls of the last, to show the regularly coiled nucleus.

LIV.—*On a new Genus of Heteromerous Coleoptera belonging to the Family* Lagriidæ, *from Tasmania.* By G. C. Champion, F.Z.S.

Sirrhas, gen. nov.

Mentum small, strongly transverse, trapezoidal, almost smooth, flat, the maxillæ exposed at the base; mandibles bifid at the tip; labrum strongly transverse, prominent, separated from the epistoma by a coriaceous space; head rather large, moderately broad, exserted, very little narrowed behind, the epistoma very broad, short, depressed, and confounded with the front, the antennary orbits short and feebly raised, not projecting over the points of insertion of the antennæ; the eyes large, moderately prominent, widely separated, somewhat distant from the base of the head; apical joint of the maxillary palpi stout, triangular, the outer side rounded and a little longer than the inner or apical sides; antennæ very elongate, slender (the first joint excepted), joints 1 to 8 sparsely punctured, shining, 9 to 11 densely punctured, opaque, 2 to 8 cylindrical, each abruptly thickened at its distal end, 2 short, 3 exceedingly long, nearly four times as long as 2, 4 about half the length of 3, 4 to 11 subequal in length, 9 to 11 a little stouter than 8 and more gradually thickened, 11 subacuminate at the tip; prothorax transversely cordate, much wider than the head, expanded and sharply margined

at the sides, the base and apex subtruncate, the apex with a fine reflexed marginal carina, the lateral margins reflexed; scutellum strongly transverse, rather large; elytra broad and depressed, about one third wider than and more than four times as long as the prothorax, broadly truncate at the base, subparallel for two thirds of their length, confusedly punctured, the humeri rounded; anterior coxæ somewhat conical, strongly exserted, subcontiguous, the prosternum not raised between them, the cavities closed behind; mesosternum largely developed anteriorly, feebly transversely depressed before the middle coxæ, the latter slightly exserted, narrowly separated, with widely open cavities and large trochantin; metasternum elongate, deeply longitudinally grooved in the middle behind; intercoxal process subtriangular; epipleuræ extending narrowly to the apex; legs rather elongate, very slender, sparsely clothed with rather long hairs, the femora slightly swollen beyond the middle, the tibial spurs short; the tarsi shorter than the tibiæ, densely clothed with fine silky hairs beneath, simple, the basal joint of the hind pair rather longer than the third and fourth joints united; body elongate, depressed, fully winged.

This genus is proposed for a single species from Tasmania. It belongs to the group Trachélosténides of the Lagriidæ, following the system of Lacordaire. The only known genus of the Trachélosténides, *Trachelostenus*, Sol., is from Chili.

Sirrhas limbatus, sp. n.

Elongate, rather broad, subparallel, depressed; pitchy brown, the margins of the prothorax narrowly and indeterminately ferruginous, the elytra broadly bordered with obscure testaceous; antennæ testaceous, the basal joints stained with piceous; legs pitchy brown, the base of the femora, the outer half of the tibiæ, and the tarsi entirely testaceous; the upper surface with scattered, short, fine, semierect hairs. Head thickly, irregularly punctured; prothorax about one fourth broader than long, much wider at the apex than at the base, widest a little behind the middle, the sides thence to the base obliquely and abruptly converging, the anterior angles strongly rounded, the hind angles very obtuse, the disk a little flattened at the base in the middle, the surface densely, moderately finely punctured, more sparsely so towards the sides anteriorly, the punctures on the middle of the disk showing a tendency to become longitudinally confluent; elytra densely, very irregularly, moderately finely punctured, with irregular double rows of very shallow areolæ, which are separated by feebly raised longitudinal lines, the areolæ here and there

confluent, and becoming deeper beyond the middle; beneath sparsely pubescent, somewhat densely, moderately coarsely punctured, the metasternum more finely punctured in the middle.

Length 12, breadth 4½ millim.

Hab. N.E. Tasmania, Gould's Country.

I have seen three specimens of this species: two recently brought from Tasmania by Mr. J. J. Walker, late of H.M.S. 'Penguin,' to whom they were given by Mr. A. Simson, of Launceston, from one of which the above description is taken (the other having been deposited by Mr. Walker in the British Museum), and a third in Mr. F. Bates's collection. Mr. Bates's specimen is lighter in colour, it being reddish brown, with the broad marginal stripe of the elytra stramineous.

Sept. 23, 1893.

LV.—*On the Nutrition of the* Salpa *Embryo.*

By W. K. Brooks*.

As the mammalian placenta nourishes and aerates the blood of the fœtus by the diffusion of gases and food in solution through the walls of the blood-vessels, it has been generally taken for granted that the placenta of *Salpa* performs its function in the same way; and it has been described as divided into a fœtal chamber and a maternal chamber, although its cavity is in reality part of the body-cavity of the chain-Salpa, and the blood which circulates in it that of the chain-Salpa. The *Salpa* embryo is bathed by the water which is constantly flowing past it, and it is therefore in very much closer relation to the external world than a mammalian embryo shut up in the interior of a large thick-walled body. There does not seem to be any need in *Salpa* for a respiratory placenta, and its thick spongy walls seem to indicate that it is not respiratory. We find in its structure nothing like the interlacing villi of the mammalian chorion, and the sections show that the embryo is nourished in a way quite unlike anything which has been described in the Mammalia.

The subject is a very interesting one. The rapid growth of the *Salpa* embryo is one of its most conspicuous characteristics, and the nutrition which this rapid growth demands

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